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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,003	01/24/2001	Shinichi Takahashi	Q62765	9261

7590 03/11/2005

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EXAMINER
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CHU, KIM KWOK

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/768,003

Applicant(s)

TAKAHASHI, SHINICHI

Examiner

Kim-Kwok CHU

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 9/27/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**Response to Remarks**

1. Applicant's Remarks filed on September 27, 2004 have been fully considered.

(a) Applicant submit a certified translation of Japanese patent application 2000-14354 which has a priority date of January 24, 2000.

(b) A newly founded reference of Uchizaki et al. which has an earlier filing date is used as a prior art.

**Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --  
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

3. Claims 1-6 and 13-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by Uchizaki et al. (U.S. Patent 6,646,975).

Uchizaki teaches an optical pickup apparatus for reading information from a plurality of types of discs at different reading wavelengths having all of the elements and means as

recited in claims 1-6. For example, Uchizaki teaches the following:

(a) as in claim 1, a light source 31' having a plurality of integrated light emitting portions 31A, 31B for emitting laser beams of different wavelengths (Fig. 7A);

(b) as in claim 1, the light source 31' being adapted to selectively emit one of the laser beams of different wavelengths (Figs. 3B and 7A; column 9, lines 58-66);

(c) as in claim 1, a photodetector 35' for detecting the laser beam (Fig. 7A);

(d) as in claim 1, an optical system 15 for directing the laser beam emitted from the light source 11 to the disc 18, 19 (Figs. 1 and 8);

(e) as in claim 1, the optical system 15 for directing the laser beam reflected by the disc to the photodetector 35 (Figs. 2A and 2B);

(f) as in claim 1, the light source 11 is positioned such that a straight line connecting respective light emitting points of the plurality of light emitting portions is coincident with a tangential line (parallel, along) of a track on a disc to be reproduced (Fig. 1; the light beam emitted from the source 11 is parallel to the tracks on the disc);

(g) as in claim 2, the optical system 15 includes an astigmatism element 33 for providing the laser beam with

astigmatism (Figs. 1, 3A, 3B; column 10, lines 50-53; hologram 33 having diffractive grating creates astigmatism on the photodetector 35);

(h) as in claim 2, the photodetector 35' includes a plurality of four-division light receiving sections 35A, 35B arranged corresponding to each of the plurality of laser beams of different wavelengths, and is configured such that central division lines of the four-division light receiving sections are in alignment with one another (Figs. 7A and 7B);

(i) as in claim 2, the photodetector 35' is disposed such that the central division lines are coincident with the tangential line of the track (Figs. 7A and 7B; reflected light spots are received at the center of the photodetecting elements);

(j) as in claims 3 and 5, the optical system 15 includes an astigmatism element 33 for providing the laser beam with astigmatism, and a diffraction element 33 for generating a pair of sub-beams from the laser beam (Figs. 3A and 31B; column 9, lines 40-57);

(k) as in claims 3 and 5, the plurality of four-division light receiving sections 35A and 35B are arranged in correspondence to each of the plurality of laser beams of different wavelengths, and further arranged such that central division lines thereof are in alignment with one another (Figs. 7A and 7B);

(l) as in claim 4, the optical system 15 includes an astigmatism element 33 for providing the laser beam with astigmatism, and a diffraction element 33 for generating a pair of sub-beams from the laser beam (Figs. 3A and 3B; column 9, lines 40-57);

(m) as in claim 4, the plurality of four-division light receiving sections are arranged in correspondence to each of the plurality of laser beams of different wavelengths, and further arranged such that central division lines thereof are in alignment with one another (Figs. 7A and 7B);

(n) as in claim 4, the subbeam receiving sections are formed with regions which can receive all sub-beams generated from all the laser beams of different wavelengths emitted from the light source (Figs. 7A and 7B);

(o) as in claim 5, two divisional regions of the four-division light receiving section for receiving an arbitrary laser beam serve as two divisional regions of a four-division light receiving section for receiving a laser beam of a different wavelength from that of the arbitrary laser beam (Figs. 7A and 7B; divisional regions of each section 37A or 37B receive its respective sub-beams);

(p) as in claim 5, the remaining two divisional regions other than the two divisional regions are also used as a sub-beam receiving section for receiving said sub-beam (Figs. 7A and 7B;

divisional regions of each section 37A or 37B receive its respective sub-beams); and

(q) as in claim 6, the light source is a one-chip laser diode which is formed with one electrode 235 as a common electrode for the plurality of light emitting portions (Fig. 9; column 15, lines 7 and 9).

4. Claims 13-18 have limitations similar to those treated in the above rejection, and are met by the reference as discussed above.

5. Claims 7 and 8 are rejected under 35 U.S.C. § 102(e) as being anticipated by Uchizaki et al. (U.S. Patent 6,646,975).

Uchizaki teaches an optical pickup apparatus for reading information from a plurality of types of discs at different reading wavelengths having all of the elements and means as recited in claims 7 and 8. For example, Uchizaki teaches the following:

(a) as in claim 7, a photodetector 35' used in conjunction with an optical pickup apparatus for reading information from a plurality of types of recording discs at different reading wavelengths (Figs. 1 and 7A);

(b) as in claim 7, the photodetector 35' has a pair of sub-beam receiving sections disposed one after the other in a direction in which central division lines extend, for receiving sub-beams (Figs. 1 and 7A; reflected light beams contains sub-beams as a result of the diffraction grating means 33);

(c) as in claim 7, the photodetector 35' has a plurality of four-division light receiving sections 35A and 35B arranged such that one of the sub-beams is received by a different four-division light receiving section adjacent to a four division light receiving section which receives a selected laser beam (Figs. 1 and 7A; reflected light beams contains sub-beams as a result of the diffraction grating means 33);



(d) as in claim 8, the photodetector 35' comprising a pair of subbeam receiving sections disposed one after the other in a direction in which central division lines extend, for receiving sub-beams (Figs. 7A and 7B; any two sections from a, b, c, and d receive sub-beams); and

(e) as in claim 8, the subbeam receiving sections a, b, c and d being formed with regions which can receive all sub-beams generated from all the laser beams of different wavelengths emitted from the light source 35A and 35B (Figs. 7A and 7B).

6. Claims 9-12 are rejected under 35 U.S.C. § 102(e) as being anticipated by Uchizaki et al. (U.S. Patent 6,646,975).

Uchizaki teaches an optical pickup apparatus for reading information from a plurality of types of discs at different reading wavelengths having all of the elements and means as recited in claims 9-12. For example, Uchizaki teaches the following:

(a) as in claim 9, an optical system operable to direct a selected laser beam towards an object disc (Fig. 1);

(b) as in claim 9, a photodetector 11 operable to detect a reflected laser beam reflected from the object disc (Fig. 1);

(c) as in claim 9, the photodetector 11 comprising a plurality of subbeam receiving sections a, b, c, d and a plurality of four division light receiving sections a, b, c, d (Figs. 7A and 7B);

(d) as in claim 10, each of the subbeam receiving sections of the photodetector 11 is operable to receive sub-beams of each of the laser beams having different respective wavelengths (Figs. 7A and 7B);

(e) as in claim 11, the subbeam receiving sections a, b, c and d of the photodetector are operable to generate tracking error TE signals corresponding to the laser beams (Figs. 4A, 7A and 7B; column 10, lines 49-63); and

(f) as in claim 12, each of the four division light receiving sections a, b, c and d corresponds to a single laser beam having a respective wavelength and is operable to receive a main portion of the corresponding laser beam and generate a read signal and a focus error signal FE for the corresponding laser beam (Figs. 4A, 7A and 7B; column 10, lines 49-63).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Akiyama (6,240,053) is pertinent because Akiyama teaches an integrated laser source having two laser emitters with different wavelengths.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C.  
20231 Or faxed to:

(703) 872-9306 (for formal communications intended for  
entry. Or:

(703) 746-6909, (for informal or draft communications,  
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Hand-delivered responses should be brought to Crystal Park  
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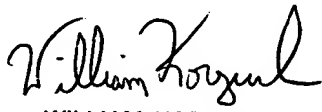
Any inquiry of a general nature or relating to the status of  
this application should be directed to the Group receptionist  
whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier  
communications from the examiner should be directed to Kim CHU  
whose telephone number is (703) 305-3032 between 9:30 am to 6:00  
pm, Monday to Friday.

lc 3/3/05

Kim-Kwok CHU  
Examiner AU2653  
March 3, 2005

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